NOTIFICATION OF ADDENDUM

ADDENDUM NO. 2

DATED 9/03/2009

Control	**2396-01-006**
Project	**STP 2010(107)**
Highway	**FM 2490**
County	**BOSQUE**

Ladies/Gentlemen:

Attached please find an addendum on the above captioned project. Included in the attachment is an adendum notification which details the changes and the respective proposal pages which were added and/ or changed.

Except for new bid insert pages, it is unnecessary to return any of the pages attached.

Bid insert pages must be returned with the bid proposal submitted to the Department, unless your firm is submitting a bid using a computer print out. The computer print out must be changed to reflect the new bid item information.

Contractors and material suppliers, etc. who have previously been furnished informational proposals are not being furnished a copy of the addendum. If you have a subcontractor on the above project, please advise them of this addendum. Acknowledgment of this addendum is not requested if your company has been issued a proposal stamped “This Proposal Issued for Informational Purposes.”

You are required to acknowledge receipt of this addendum on the Addendum Acknowledgement form contained in your bid proposal by placing a mark in the box next to the respective addendum.

Failure to Acknowledge receipt of this addendum in your bid proposal will result in your bid not being read.

04/99

SUBJECT: PLANS AND PROPOSAL ADDENDUMS

PROJECT: STP 2010(107) CONTROL: 2396-01-006

COUNTY: BOSQUE

LETTING: 09/10/2009

REFERENCE NO: 0902

PROPOSAL ADDENDUMS

_ PROPOSAL COVER

X BID INSERTS (SH. NO.: 2-8 THRU 8-8)

X GENERAL NOTES (SH. NO.: A & L)

_ SPEC LIST (SH. NO.:)

_ SPECIAL PROVISIONS:

ADDED:

DELETED:

_ SPECIAL SPECIFICATIONS:

ADDED:

DELETED:

X OTHER: PLAN SHEETS, E&Q ESTIMATE SHEET, GEN. NOTES SHEETS

DESCRIPTION OF ABOVE CHANGES
(INCLUDING PLANS SHEET CHANGES)

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********** PROPOSAL **********

(1). BID INSERT, PAGE 2-8, ITEM 314-2021, DELETED.

(2). BID INSERT, PAGE 2-8, ITEMS 316-2015 & 316-2406 ADDED.

(3). BID INSERT, PAGE 7-8, ITEM 662-2004,

(4). BID INSERT, PAGE 7-8, ITEMS 662-2030, 662-2032, & 662-2115, REVISED.

(5). GENERAL NOTES, SHEET A, ITEM 316 REVISED.

(6). GENERAL NOTES, SHEET K, ITEM 316, ADDED PARAGRAPH.

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********** PLAN SHEETS **********

(7). PLAN SHEET # 5, ITEM 316 NOTE REVISED.

DESCRIPTION OF ABOVE CHANGES (CONTINUED)
(INCLUDING PLANS SHEET CHANGES)

(8). PLAN SHEET # 10, ITEM 316 NOTE REVISED.

(9)). PLAN SHEET # 12, ESTIMATE SUMMARY SHEET REVISED DUE TO THE ABOVE ITEMS REVISED OR ADDED.

(10). PLAN SHEET # 13, ESTIMATE SUMMARY SHEET REVISED DUE TO THE ABOVE ITEMS REVISED OR ADDED.

(11). PLAN SHEETS # 4, # 14, & # 20, REVISED.

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********** END **********

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	100	2002		PREPARING ROW DOLLARS and CENTS	STA	419.000	1
	104	2017		REMOVING CONC (DRIVEWAYS) DOLLARS and CENTS	SY	672.000	2
	132	2020		EMBANKMENT (VEHICLE)(DENS CONT)(TY B) DOLLARS and CENTS	CY	12,000.000	3
	152	2003		ROAD GRADER WORK (DENS CONT) DOLLARS and CENTS	STA	419.000	4
	160	2003		FURNISHING AND PLACING TOPSOIL (4") DOLLARS and CENTS	SY	232,320.000	5
	164	2010	002	BROADCAST SEED (TEMP) (WARM) DOLLARS and CENTS	AC	40.000	6
	164	2012	002	BROADCAST SEED (TEMP) (COOL) DOLLARS and CENTS	AC	40.000	7
	164	2036	002	DRILL SEEDING (PERM) (RURAL) (CLAY) DOLLARS and CENTS	AC	80.000	8
	168	2001		VEGETATIVE WATERING DOLLARS and CENTS	MG	1,080.000	9
	169	2001	002	SOIL RETENTION BLANKETS (CL 1) (TY A) DOLLARS and CENTS	SY	6,898.000	10

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	169	2003	002	SOIL RETENTION BLANKETS (CL 1) (TY C) DOLLARS and CENTS	SY	4,556.000	11
	216	2001		PROOF ROLLING DOLLARS and CENTS	HR	50.000	12
	247	2044	039	FL BS (CMP IN PLC)(TY A GR 4)(FNAL POS) DOLLARS and CENTS	CY	37,225.000	13
	251	2015		REWORK BS MTL (TY D) (6") (DENS CONT) DOLLARS and CENTS	STA	419.000	14
	316	2006		ASPH (AC-20-5TR) DOLLARS and CENTS	GAL	66,735.000	15
	316	2010		ASPH (CRS-2) DOLLARS and CENTS	GAL	114,403.000	16
	316	2015		ASPH (RC-250) DOLLARS and CENTS	GAL	47,668.000	17
	316	2363		AGGR (TY-PD GR-4 OR TY-PL GR-4)(SAC-B) DOLLARS and CENTS	CY	1,526.000	18
	316	2406		AGGR (TY-B GR-5 OR TY-L GR-5 SAC-B) DOLLARS and CENTS	CY	1,362.000	19
	316	2621		AGGR (TY D GR-3 OR TY L GR-3)(SAC B) DOLLARS and CENTS	CY	2,007.000	20
	400	2005		CEM STABIL BKFL DOLLARS and CENTS	CY	1,218.000	21

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	401	2001		FLOWABLE BACKFILL DOLLARS and CENTS	CY	7.000	22
	402	2001		TRENCH EXCAVATION PROTECTION DOLLARS and CENTS	LF	863.000	23
	403	2001		TEMPORARY SPL SHORING DOLLARS and CENTS	SF	1,576.000	24
	432	2002		RIPRAP (CONC)(5 IN) DOLLARS and CENTS	CY	21.000	25
	462	2002		CONC BOX CULV (3 FT X 3 FT) DOLLARS and CENTS	LF	74.000	26
	462	2004		CONC BOX CULV (4 FT X 3 FT) DOLLARS and CENTS	LF	59.000	27
	462	2007		CONC BOX CULV (5 FT X 3 FT) DOLLARS and CENTS	LF	60.000	28
	462	2008		CONC BOX CULV (5 FT X 4 FT) DOLLARS and CENTS	LF	72.000	29
	462	2011		CONC BOX CULV (6 FT X 4 FT) DOLLARS and CENTS	LF	63.000	30
	462	2016		CONC BOX CULV (7 FT X 5 FT) DOLLARS and CENTS	LF	108.000	31
	462	2017		CONC BOX CULV (7 FT X 6 FT) DOLLARS and CENTS	LF	79.000	32

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	462	2019		CONC BOX CULV (8 FT X 4 FT) DOLLARS and CENTS	LF	60.000	33
	462	2034		CONC BOX CULV (10 FT X 10 FT) DOLLARS and CENTS	LF	28.000	34
	464	2003		RC PIPE (CL III)(18 IN) DOLLARS and CENTS	LF	361.000	35
	464	2005		RC PIPE (CL III)(24 IN) DOLLARS and CENTS	LF	607.000	36
	464	2007		RC PIPE (CL III)(30 IN) DOLLARS and CENTS	LF	80.000	37
	464	2009		RC PIPE (CL III)(36 IN) DOLLARS and CENTS	LF	535.000	38
	466	2028		WINGWALL (FW-0)(HW=12 FT) DOLLARS and CENTS	EA	2.000	39
	466	2037		WINGWALL (FW-S)(HW=7 FT) DOLLARS and CENTS	EA	2.000	40
	467	2025		SET (TY I)(S= 3 FT)(HW= 5 FT)(3:1)(C) DOLLARS and CENTS	EA	2.000	41
	467	2032		SET (TY I)(S= 4 FT)(HW= 5 FT)(3:1)(C) DOLLARS and CENTS	EA	2.000	42
	467	2040		SET (TY I)(S= 5 FT)(HW= 5 FT)(3:1)(C) DOLLARS and CENTS	EA	2.000	43

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	467	2041		SET (TY I)(S= 5 FT)(HW= 6 FT)(3:1)(C) DOLLARS and CENTS	EA	2.000	44
	467	2049		SET (TY I)(S= 6 FT)(HW= 5 FT)(3:1)(C) DOLLARS and CENTS	EA	1.000	45
	467	2050		SET (TY I)(S= 6 FT)(HW= 6 FT)(3:1)(C) DOLLARS and CENTS	EA	1.000	46
	467	2060		SET (TY I)(S= 7 FT)(HW= 7 FT)(3:1)(C) DOLLARS and CENTS	EA	2.000	47
	467	2061		SET (TY I)(S= 7 FT)(HW= 8 FT)(3:1)(C) DOLLARS and CENTS	EA	4.000	48
	467	2067		SET (TY I)(S= 8 FT)(HW= 6 FT)(3:1)(C) DOLLARS and CENTS	EA	2.000	49
	467	2211		SET (TY II)(24 IN)(RCP)(3:1)(C) DOLLARS and CENTS	EA	20.000	50
	467	2215		SET (TY II)(36 IN)(RCP)(3:1)(C) DOLLARS and CENTS	EA	16.000	51
	467	2286		SET (TY II)(18 IN)(RCP)(6:1)(P) DOLLARS and CENTS	EA	32.000	52
	467	2290		SET (TY II)(30 IN)(RCP)(6:1)(P) DOLLARS and CENTS	EA	4.000	53
	496	2007		REMOV STR (PIPE) DOLLARS and CENTS	LF	1,908.000	54

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	500	2001	005	MOBILIZATION DOLLARS and CENTS	LS	1.000	55
	502	2001	033	BARRICADES, SIGNS AND TRAFFIC HANDLING DOLLARS and CENTS	MO	19.000	56
	506	2002	011	ROCK FILTER DAMS (INSTALL) (TY 2) DOLLARS and CENTS	LF	870.000	57
	506	2003	011	ROCK FILTER DAMS (INSTALL) (TY 3) DOLLARS and CENTS	LF	660.000	58
	506	2009	011	ROCK FILTER DAMS (REMOVE) DOLLARS and CENTS	LF	1,530.000	59
	506	2026	011	FRNT END LOADER WORK (ERSN & SEDM CONT) DOLLARS and CENTS	HR	50.000	60
	506	2034	011	TEMPORARY SEDIMENT CONTROL FENCE DOLLARS and CENTS	LF	13,265.000	61
	530	2010		DRIVEWAYS (CONC) DOLLARS and CENTS	SY	160.000	62
	530	2012		DRIVEWAYS (SURF TREAT) DOLLARS and CENTS	SY	4,250.000	63
	560	2006	001	MAILBOX INSTALL-S (RR-POST) TY 4 FND-TB DOLLARS and CENTS	EA	6.000	64

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	644	2001		INS SM RD SN SUP&AM TY 10BWG(1) SA(P) DOLLARS and CENTS	EA	1.000	65
	644	2004		INS SM RD SN SUP&AM TY 10BWG(1) SA(T) DOLLARS and CENTS	EA	2.000	66
	644	2053		INS SM RD SN SUP&AM TY TWT(1) WA(P) DOLLARS and CENTS	EA	24.000	67
	644	2054		INS SM RD SN SUP&AM TY TWT(1) WA(T) DOLLARS and CENTS	EA	3.000	68
	644	2064		INS SM RD SN SUP&AM TY S80(1)SA(U-EXAL) DOLLARS and CENTS	EA	3.000	69
	644	2065		RELOCATE SM RD SN SUP & AM TY TEMP DOLLARS and CENTS	EA	34.000	70
	658	2334		INSTL OM ASSM (OM-2Z)(RCR)GND DOLLARS and CENTS	EA	48.000	71
	662	2004		WK ZN PAV MRK NON-REMOV (W) 4" (SLD) DOLLARS and CENTS	LF	83,425.000	72
	662	2030		WK ZN PAV MRK NON-REMOV (Y) 4" (BRK) DOLLARS and CENTS	LF	4,868.000	73
	662	2032		WK ZN PAV MRK NON-REMOV (Y) 4" (SLD) DOLLARS and CENTS	LF	25,894.000	74

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	662	2115		WK ZN PAV MRK SHT TERM (TAB) TY Y-2 DOLLARS and CENTS	EA	13,494.000	75
	666	2048		REFL PAV MRK TY I (W) 24"(SLD)(100MIL) DOLLARS and CENTS	LF	96.000	76
	672	2015	034	REFL PAV MRKR TY II-A-A DOLLARS and CENTS	EA	524.000	77
	5750	2001		ENVIRO MONITOR/TRAIN PERMIT IMPLE-MENT DOLLARS and CENTS	MO	19.000	78
	8251	2006		RE PM W/RET REQ TY I(W)4"(SLD)(100MIL) DOLLARS and CENTS	LF	83,425.000	79
	8251	2015		RE PM W/RET REQ TY I(Y)4"(BRK)(100MIL) DOLLARS and CENTS	LF	5,406.000	80
	8251	2018		RE PM W/RET REQ TY I(Y)4"(SLD)(100MIL) DOLLARS and CENTS	LF	59,541.000	81

County: Bosque **Control:** 2396-01-006

Highway: FM 2490

GENERAL NOTES AND SPECIFICATION DATA

SPECIFICATION DATA

(PERCENT RETAINED-SIEVE)

DESCRIPTION	2”	1 1/2”	#4	#40	PI MAX	PI MIN
FLEXIBLE BASE (TYPE A, GRADE 4)	0	0-10	45-75	70-85	12	4

1. This material shall be produced from a source which when tested in accordance with test method TEX-117-E, PART 1, shall meet the requirements of class 2.3 material.
2. This material shall be produced from a source which when tested in accordance with test method TEX-116-E, the maximum wet ball mill value shall not exceed 45 and the maximum increase of material passing the No. 40 sieve shall not exceed 20 percent.

3. Job control samples for gradation and P.I. testing will be taken from the windrow after blade mixing.

BASIS OF ESTIMATE

ITEM	DESCRIPTION	RATE	BASIS	QUANTITIES
*166	FERTILIZER (20-10-10)	300.00 LB/AC	80 AC	12 TON
168	VEGETATIVE WATERING	13,100 GAL/AC/APP	80 AC	1080 MG
316	SURFACE TREATMENTS			
	AGGR (TY PD OR PL GR 4)	1/125 CY/SY	190,671 SY	1,526 CY
	AGGR (TY D OR L GR 3)	1/95 CY/SY	190,671 SY	2,007 CY
	ASPH (CRS-2)	0.60 GAL/SY	190,671 SY	114,403 GAL
	ASPH (AC-20-5TR)	0.35 GAL/SY	190,671 SY	66,735 GAL
	AGGR (TY B OR L GR 5)	1/140 CY/SY	190,671 SY	1,362 CY
	ASPH (RC-250)	0.25 GAL/SY	190,671 SY	47,688 GAL

FOR CONTRACTOR’S INFORMATION ONLY

GENERAL NOTES

ITEM 4: SCOPE OF WORK

Prior to final acceptance, all new structures and/or structures that have been extended shall be cleaned out by the contractor. This work will not be paid for directly but will be considered subsidiary to the various bid items.

ITEM 5: CONTROL OF THE WORK

All elevations are based on an assumed bench mark elevation.

Prior to beginning work in the area of existing utilities, the contractor shall contact the utility companies for exact locations to prevent any damage or interference with present facilities. The TEXAS ONE CALL system shall be notified at the following toll-free number: (1-800-245-4545). Local water and wastewater utility companies may not be included in the TEXAS ONE CALL system and therefore shall be notified individually. This action shall in no way be interpreted as relieving the contractor of his responsibilities, under the terms of the contract and as set out in the plans and specifications. The contractor shall repair any damage caused by his operations, at his own expense and shall restore facilities to service in a timely manner.

ITEM 6: CONTROL OF MATERIALS

Mixing of materials, storing of materials, storing of equipment, or repairing of equipment on top of concrete pavement or bridge decks will not be permitted unless specifically authorized by the Engineer. Permission will be granted to store materials on surfaces if, in the opinion of the Engineer, no damage or discoloration will result.

References to manufacturer's trade name or catalog numbers are for the purpose of identification only and the contractor will be permitted to furnish like materials of other manufacturers provided they are of equal quality and comply with specifications for this project and are approved by the Engineer.

Submit all fabrication and shop drawings to the Area Engineer for review and approval.

ITEM 7: LEGAL RELATIONS AND RESPONSIBILITIES

The use of existing or new bridges for staging construction equipment or materials will not be permitted without written approval by the Engineer. To obtain this approval submit a working plan to the Engineer including loading information, spacing and dimensions. This working plan must be signed and sealed by a licensed or registered Professional Engineer.

If utilizing private property for waste disposal sites, equipment storage sites or for any other purpose involved with this project, provide to the Engineer written proof of the property owner's approval of the use of this property. This proof may be in the form of a letter or agreement signed by the property owner or other documents acceptable to the Engineer.

Follow all local ordinances when burning cleared trees or brush.

Where existing pavement adjoins new pavement, saw the existing pavement to a neat transverse and/or longitudinal line to permit adequate joining. This will not be paid for directly, but will be considered subsidiary to the various bid items.
Protect all adjoining pavement sections during all phases of construction. Any damages incurred due to contractors operation shall be repaired and/or replaced at the contractor's expense.

There may be some weight-limit bridges located in the vicinity of this project that will be involved in routing materials, transit-mix trucks and all other heavy equipment to the project sight. The contractor will be responsible for his own access route investigation and compliance with all posted load limits.

Personal vehicles of the contractor's employees shall not be parked within the right-of-way at anytime including any section closed to public traffic, unless the vehicle is being utilized for construction procedures. However the contractor's employees may park on the right-of-way at the sites where the contractor has his office, equipment and materials storage yard.

The contractor shall not initiate activities in a project specific location (PSL) associated with a U.S. Army Corps of Engineers (USACE) permit area that has not been previously evaluated by the USACE as part of the permit review of this project. Such activities include, but are not limited to, haul roads, equipment staging areas, borrow and disposal sites. Associated defined here means materials are delivered to or from the PSL. The permit area includes all waters of the U.S. or associated wetlands affected by activities associated with this project. Special restrictions may be required for such work. The contractor shall be responsible for any and all consultations with the USACE regarding activities, including project specific locations (PSLs), which have not been previously evaluated by the USACE. The Contractor shall provide the department with a copy of all consultation(s) or approval(s) from the USACE prior to initiating activities.

The contractor may proceed with activities in PSLs that do not affect a USACE permit area if a self determination has been made that the PSL is non-jurisdictional or proper USACE clearances have been obtained in jurisdictional areas or have been previously evaluated by the USACE as part of the permit review of this project. The contractor is solely responsible for documenting any determination(s) that their activities do not affect a USACE permit area. The contractor shall maintain copies of their determination(s) for review by the department or any regulatory agency.

The contractor must document and coordinate with the USACE, if required, prior to any excavation hauled from or embankment hauled into a USACE permit area by either (1) or (2) below.

(1) Restricted Use of Materials for the Previously Evaluated Permit Areas. The Contractor will document both the project specific location (PSL) and their authorization. The contractor will maintain copies for review by the department or any regulatory agency. When an area within the project limits has been evaluated by the USACE as part of the permit process for this project:

a. Suitable excavation of required material in the areas shown on the plans and cross sections as specified in Item 110 is used for permanent or temporary fill (Item 132, Embankment) within a USACE permit area;
b. Suitable embankment (Item 132) from within the USACE permit area is used as fill within a USACE evaluated area; and,
c. Unsuitable excavation or excess excavation ["Waste"] (Item 110) that is disposed of at a location approved by the Engineer within a USACE evaluated area.

(2) Contractor Materials from Areas Other than Previously Evaluated Areas. The Contractor will provide the department with a copy of all USACE coordination or approval(s) prior to initiating any activities for an area within the project limits that has not been evaluated by the USACE or for any off right of way locations used for the following, but not limited to, haul roads, equipment staging areas, borrow and disposal sites:

a. Item 132, Embankment, used for temporary or permanent fill within a USACE permit area; and,
b. Unsuitable excavation or excess excavation ["Waste"] (Item 110, Excavation) that is disposed of outside a USACE evaluated area.

The total area disturbed for this project is 116 acres. The disturbed area in this project, all project locations in the Contract, and the Contractor project specific locations (PSLs), within 1 mile of the project limits, for the Contract will further establish the authorization requirements for storm water discharges. The Department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction activities shown on the plans. The Contractor is to obtain required authorization from the TCEQ for Contractor PSLs for construction support activities on or off the ROW. When the total area disturbed in the Contract and PSLs within 1 mile of the project limits exceeds 5 acres, provide a copy of the Contractor NOI to the Engineer and to the local government that operates a separate storm sewer system.

Throughout the course of the project, when in the opinion of the Engineer, tall grass and weeds affect the safety of the public by restricting visibility, interfere with normal traffic flow or appear unsightly, the contractor shall be required to mow same. Final cleanup will include mowing of grass and weeds. This work will not be paid for directly but will be considered as subsidiary to the various bid items.

Remove all vegetation from pavement edges, intersections and driveways prior to planing, seal coat or ACP operations. This work will not be paid for directly but will be subsidiary to the various bid items.

The contractor is alerted to the possible presence of swallows under the existing bridges or culverts. Because the migratory bird treaty act prohibits harm to swallows, their eggs or their nestlings, the contractor shall not begin potentially disturbing activities on or near the bridge

until the birds have abandoned any occupied nests (approximately September 1). Active nests may not be removed regardless of the date.

Prior to the swallows returning to the nests (approximately March 1), abandoned nests shall be removed from the bridge. The contractor shall prevent the establishment of new nests on any portion of the structure. Methods for preventing the establishment of new nests must be approved by the project engineer. Examples of acceptable nest prevention methods are bird-deterrent netting and bird-repelling sprays and/or gels to be applied to the structure. This work will not be paid for directly, but will be subsidiary to the various bid items.

General Notes for Work in Waters of the US

1. TxDOT will establish "limits of waters of the United States" to designate stream banks (Ordinary High Water Marks) and wetland boundaries for the project with wood lathing and flagging. These areas have specific Corps of Engineer 404 permit requirements as stated in the following notes.

2. For bridges, the contractor shall provide and maintain orange plastic security fencing (called orange fencing) slightly above the Ordinary High Water Marks, on each side of the stream and from ROW line to ROW line. For culverts, the contractor shall provide and maintain orange fencing slightly above the Ordinary High Water Marks, on each side of the stream on the upstream and downstream culvert ends outside the limits of permanent facilities to the ROW lines. No construction activities or access below the orange fencing shall be allowed, unless approved by TxDOT. The boundaries for wetland areas shall also be established with orange fencing and timber mats must be used to support heavy equipment.

3. The contractor shall submit detailed site specific plans for work in each "water of the United States" designated on the EPIC sheet. These plans must be approved by the TxDOT Engineer prior to starting any work in these areas. The plans must also describe facilities and work activities adjacent the Ordinary High Water Marks. The plan must show actual dimensions and materials for:
    - proposed construction roads and work areas leading to or in close proximity the Ordinary High Water Marks
    - temporary material or equipment storage areas in close proximity to the Ordinary High Water Marks
    - locations of proposed sediment and erosion control devices
    - identification of construction equipment and construction techniques to accomplish the work

    Once this drawing and supporting information is reviewed and approved by TxDOT, all construction workers should be made aware of the limits designated on the drawings by the Contractor's supervision. Work in all waters of the US will be limited to the minimum necessary required to construct the bridge, culvert or roadway fills. Work

shall also include all activities needed for bridge and culvert demolitions. Working or disturbing soil in the stream channel outside the limits of the work plan will not be allowed. Orange fencing shall be provided and maintained to establish the TxDOT approved boundaries in which work may be conducted between the Ordinary High Water Marks.

4. Storm water from disturbed soil areas draining towards wetlands shall either be re-routed or adequate sediment control devices installed to protect the wetland.

5. The Contractor shall select concrete bridge demolition methods that will meet all 404 requirements. Bridge demolition between Ordinary High Water Marks may typically include bridge slabs, girders, columns and foundations. The use of jack hammers or crushing techniques shall be conducted over timber mats wide enough for the downed bridge and for access and use of construction equipment to fully remove the wrecked structure. Concrete structures requiring demolition shall not be fully processed into small pieces between the Ordinary High Water Marks. Large sections of the wrecked concrete structure should be lifted or moved to an upland area for further processing with the processing area using appropriate sediment control devices. Demolitions should be avoided during high stream levels. Efforts shall be made to minimize bridge rubble, including fine concrete materials produced through the demolition process, water from saw cutting activities or soils moved during demolition activities from entering the stream.

6. The construction or demolition of culverts should take place in a manner that does not block the flow in a 404 stream. Removal or demolition of bridge class culverts should be accomplished similar to bridge demolitions, but timber mats are not required. Efforts shall be made to minimize culvert rubble, including fine concrete materials produced through the demolition process, concrete saw cutting water or soils moved during demolition activities from entering the stream. Minimal stream channel disturbance should occur both upstream and downstream of culverts between the Ordinary High Water Marks.

7. No excavated material, including spoils from drill shafts shall be deposited within the Ordinary High Water Marks at any time. Excavated material shall be immediately hauled to an approved temporary upland material storage area on TxDOT ROW. Excess material shall be hauled from the project site or spread above the stream bank limits as directed by the TxDOT Engineer. Adequate stabilization and sediment control devices shall be provided for soil materials spread and graded above the stream bank limits on TxDOT ROW.

8. No equipment or chemicals shall be stored overnight within waters of the US (between the Ordinary High Water Marks). Special care shall be taken to contain all sanitary waste, petroleum products or chemicals from leaking or entering the stream. The

Contractor shall make provisions to collect all construction related trash and debris each work day and to provide adequate containers for storage and removal.

9. Upon completion of work, all excess construction materials, construction debris, timber mats, shall be carefully removed from between the Ordinary High Water Marks of the stream while minimizing additional earth disturbance, protecting existing aquatic vegetation and limiting stream turbidity. Timber mats, located below the Ordinary High Water Marks shall be carefully removed by construction equipment located above the Ordinary High Water Marks. Stream shaping below the Ordinary High Water Marks, after removal of timber mats or other construction activities shall only be conducted when directed by TxDOT.

10. Adequate sediment and erosion control devices shall be installed to preclude sediment from entering the stream and to the requirements of the storm water permit. Continuous silt fences with angled end sections and / or rock filter dams shall be installed along the entire length of disturbed soils, slightly above and parallel the High Water Marks of the stream and upslope of orange fencing specified in Item 2. No rock filter dams or other controls shall be installed across 404 streams below the Ordinary High Water Marks for either bridge or culvert installations. Large diameter compost logs shall typically be used on the boundaries of timber mats located between the Ordinary High Water Marks. Vegetation shall be established as soon as possible, beginning immediately when areas are brought to the proper lines and grades. Soil retention blankets and channel liners are encouraged to minimize erosion and promote vegetation development.

11. During any construction or demolition operations, soil shall never be pushed from the high bank into the stream channel below the Ordinary High Water Marks. Soil may be removed and shaped as necessary along the stream bank slopes above the Ordinary High Water Marks to facilitate construction with excess material being moved to high ground.

12. Trees removed between the Ordinary High Water Marks shall be saw cut. No mobile construction equipment shall be used to remove vegetation between the Ordinary High Water Marks. Trees will be cut flush with the ground level and pulled above the Ordinary High Water Marks for further processing. Only trees designated by the TxDOT Engineer shall be removed. No chemicals or stump grinding shall be used between the Ordinary High Water Marks. Follow all local ordinances when burning cleared trees or brush.

13. No water shall be pumped from any water of the US without a permit from the appropriate River Authority or the Texas Commission on Environmental Quality. Upland stock tanks are exempt from this requirement.

14. Temporary construction roads or ramps, if approved by the Engineer, shall be constructed of material that will not erode and transport fine grain sediment downstream under high flows. Acceptable earthwork materials shall be rock material of 4” to 6” inch diameter.

The use of rock and inert materials such as structural steel sections, wood mats, concrete mats, filter fabrics and concrete barriers shall be acceptable to build roads and ramps. Fills consisting of clay, sands or other fine grain materials shall not be used between the Ordinary High Water Marks. Loose earth materials generated by excavation between the Ordinary High Water Marks shall be re-compacted or moved to a high bank area before the end of each day. Temporary construction roads and ramps shall be removed as soon as possible and the stream channel returned to a near original condition. Earth materials (clays and sand) that fall from construction equipment onto roads or ramps, between the Ordinary High Water Marks, shall be cleaned and removed daily.

15. To facilitate culvert or bridge construction work, low stream flows may be temporarily pumped or routed around construction activities. Stream flow should not be stopped. To facilitate pumping or routing of low flows, whatever sumps or obstructions used to control the stream flow shall not be constructed of fine grained clays or sands.

16. Utility relocations across 404 designated streams shall also follow the applicable notes for Waters of the US and shall provide minimal disturbance to the stream channel.

ITEM 8: PROSECUTIONS AND PROGRESS

For this project Five-Day Workweek Charges will be charged in accordance with Section 8.3.A.1, “Five-Day Workweek”.

Prior to contract letting, the conceptual construction schedule as developed for the contract time determination will be made available by the state at the Area Engineers’ office for prospective bidders review. The schedule will be in hard copy form and made available for copying by the contractor. This supplied schedule is for informational purposes only. It is the responsibility of the prospective bidder to determine a construction schedule for the work in this contract.

The contractor will be expected to schedule this work so that the base placement operations will follow the subgrade work as closely as practical in order to reduce the hazard to the traveling public and prevent undue delay from wet weather.

Do not begin work on the roadway until 30 minutes after sunrise and all equipment and personnel shall be off the road and lanes opened to traffic by 30 minutes before sunset when utilizing temporary lane closures.

In the event utility lines needing unforeseen adjustments are encountered during construction operations, alter operations and continue to prosecute the contract in such a manner that will allow utility adjustments to be made by others.

Construction schedules provided by the Contractor shall include line items required to maintain compliance with the storm water permit. Those line items shall include, but not be limited to installing / removing storm water sediment controls, installing soil retention blankets/channel

liners, top soil / compost placement, seeding (temporary and permanent), and placement of permanent erosion controls, earthwork and grading.

ITEM 100: PREPARING RIGHT OF WAY

The removal of trees and vegetation shall be subsidiary to ITEM 100. Preserve all trees designated by the Engineer.

All trees and brush removed each day shall be disposed of within the same day of removal unless otherwise approved by the Engineer. If removed vegetation is burned, ashes from burned vegetation shall not be placed or allowed to be transported by storm water into any stream. Burn locations, if approved, shall be no closer than 300 feet from a stream. Earth berms shall be used around burn areas to keep ash in place.

The Contractor is prohibited from removing grass vegetation throughout the entire project limits and then ceasing construction for long periods, typically over three weeks. The Contractor schedule shall be developed based on staged vegetation removal, limiting disturbed soil to no more than 25 percent at one time, unless otherwise approved by the Engineer. Should the Contractor not be able to adequately control sediment and erosion for areas disturbed, TxDOT shall substantially reduce the size of areas that the Contractor may disturb soil. Should the project be evaluated to have sediment control problems as a result of the Contractor disturbing excessive amounts of soil, the Contractor shall be required to immediately re-vegetate (seed and water) those disturbed areas at no cost to TxDOT.

ITEMS 110 & 132: EXCAVATION & EMBANKMENT

In those cases where fixed features require, the governing slopes indicated herein may be varied between the limits and to the extent determined by the Engineer.

When excavation is required to adjust stream flow lines at culvert ends, flatten the side slopes of channels and the back slopes of parallel ditches to the maximum extent possible within the existing right of way and channel easements.

Storm water containing suspended sediment and turbidity needing to be removed from excavations or low areas shall be pumped or gravity drained through vegetated buffer strips (50 foot minimum) or placed in ditches with temporary sediment controls, prior to the water being discharged into a stream.

ITEM 152: ROAD GRADER WORK

To construct the subgrade and slopes as shown on the typical sections, the haul of extra embankment material up to 0.5 mile may be necessary. The loading and haul of this material is subsidiary to item 152. When approved by the Engineer, the loading and transporting of embankment farther than 0.5 mile or from off the project will be paid for under item 132.

The limits of blade and grading operations shall be to the minimum width and length necessary to accomplish the required work. The Contractor shall limit the removal of permanent grass that is already established at the proper lines and grades.

ITEM 160: TOPSOIL

Topsoil shall be excavated and stockpiled from the top six inches of the ground surface consisting of grass growing soil located within the project ROW.

Stockpile methods for topsoil shall be approved by TxDOT. No topsoil shall be used or wasted as fill material unless approved by TxDOT. If additional topsoil is needed for this item, it shall come from approved sources outside of the ROW and shall come from the top six inches of the natural ground surface consisting of grass growing soil. Off ROW top soil shall contain a minimum organic content of 3.5%, based on soil test results.

ITEM 164: SEEDING FOR EROSION CONTROL

Subsidiary to Item 164, the Contractor should expect multiple mobilizations to perform drill seeding (temporary and/or permanent seed) to meet typical storm water permit requirements.

Final grading and stabilization should be initiated as the overall work progresses and should typically be scheduled in sequence with completion of base course installation along the length of the road project. Seeding shall not wait until the end of the project work.

All temporary and permanent seeding shall be planted by drill seeding.

Temporary seeding mixtures (cool and warm) shall also include an extra 3 lbs of Bermuda grass seed per acre, with all seeds being planted concurrently.

Temporary cool seed mixtures shall be as stated in the specification or at the option of TxDOT a direct substitution of 30 lbs per acre of Dwarf Annual Ryegrass (Axcella 2 Variety) including the 3 lbs of Bermuda grass seed shall be planted.

For drill seeding installations, the pasture or rangeland type drill shall have a minimum of three seeding compartments to separate the fine and fluffy seeds and must be capable of being calibrated so the seed mixtures will be planted uniformly.

ITEM 168 VEGETATIVE WATERING

Watering between December 1st and February 1st can begin on seeded areas upon planting and before a natural rainfall. During other planting periods and unless approved by TxDOT, vegetation watering by means water trucks shall not be started on newly planted seeds until a natural rain of ½ inch has occurred after planting. .

ITEM 247: FLEXIBLE BASE

After the existing pavement is scarified and spread evenly over the proposed subgrade, incorporate additional flexible base into the scarified material. Spread the resulting mixture and compact to the required density as required for ITEM 247 and to the lines and grades set forth in the plans and as directed by the Engineer.

Place the material in approximately equal courses not to exceed 6 inches in depth per course. During mixing and laying operations, sufficient water shall be added to the material to insure that the moisture content is not less than optimum moisture as determined by test method TEX-113-E.

ITEM 251: REWORKING BASE COURSES

Indicated quantities of flexible base to be salvaged are for estimating purposes only. Salvage all acceptable base material encountered in the existing base, including intersection areas, as directed by the Engineer regardless of quantities involved. This work shall be paid for as specified in Item 251.

Material shall be excavated a depth of 10" at the begin and end of each project to allow placement of 10" of new base to allow a smooth transisiton between the existing pavement and proposed pavement. The transition to existing elevation shall be accomplished within 200' from the ends of the project.

Once existing pavement has been spread and reshaped to the proposed width, proof rolling shall be performed in accordance with Item 216 to locate unstable areas needing repair.

TEM 300: ASPHALTS, OILS & EMULSIONS

The Contractor shall not clean hot mix lay down equipment, trucks and other asphalt support equipment with liquid chemicals, petroleum products or diesel while the Contractor equipment is on TxDOT ROW. Cleaning the hot mix equipment on Contractor PSL will require full containment and disposal of chemical wastes.

AC-20-5TR material shall meet ASTM TEST-D-5546 with minimum solubility of 98%

No asphalt treatments shall be applied just prior to a rain event that could result in chemical asphalt or any asphalt by-product pollutant being washed into a stream.

ITEM 302: AGGREGATES FOR SURFACE TREATMENTS

The pre-coated aggregate target value for residual bitumen shall be determined by the Engineer. This value shall be in the range of 0.5 to 1.5 % by weight of residual bitumen from a pre-coating material.

ITEM 314: EMULSIFIED ASPHALT TREATMENT

Apply emulsified asphalt treatment to areas as directed by the Engineer.

The finished surface of flexible base shall be processed with emulsified asphalt as directed by the engineer.

Prior to application, emulsion may be diluted with water up to a maximum dilution of one part emulsion to six parts water (14% diluted emulsion mixture) as directed by the Engineer.

ITEM 316: SURFACE TREATMENTS

The surface treatment using RC-250 shall be cured for a minimum of 90 days with high temperatures above 70 degrees Fahrenheit before placing subsequent surface treatments.

No asphalt for surface treatment items will be placed between September 15 and June 15 for AC unless approved by the Engineer in writing.

No asphalt for surface treatment items will be placed between October 1 and April 1 for emulsions unless approved by the Engineer in writing.

All trucks hauling materials to be paid for by truck measurement shall be “struck off” prior to delivery to the project.

During application of the surface treatment, if existing conditions warrant, the lane widths, transitions, and intersection areas may be varied as directed by the Engineer.

Use a medium pneumatic roller meeting the requirements of Item 210 as directed by the Engineer. This work will be subsidiary to the various bid items.

ITEM 400: EXCAVATION AND BACKFILL FOR STRUCTURES

Aggregate for cement stabilized backfill shall be GRADE 3, 4 or 5 coarse aggregate shown in ITEM 421, “HYDRAULIC CEMENT CONCRETE”.

CLASS B bedding is required if rock is encountered.

ITEM 420: CONCRETE STRUCTURES

Reduce headwall heights, if necessary, to provide a maximum of 3 inches projection above the roadway slope. No increase or decrease will be made in plan quantities of concrete or reinforcing steel for this work.

Paint the Control -Section - Structure (CSS) number on the right side of each approach end of finished bridges or culverts, using black exterior paint and stencils that result in two inch high numbers. All numbers should be legible and free of smears or drips. Unless otherwise directed

by the Engineer, the nine digit CSS number shall be placed within two feet of the end of each bridge type as follows: concrete or steel girder bridge on outside of girder, slab type bridge on outside of slab, bridge class culverts on outside of headwall. The painting of these numbers will not be paid for directly but will be considered subsidiary to the various bid items.

All construction products used to construct concrete structures and bridges including but not limited to plastics, Styrofoam, grease, glues, caulking, adhesives, solvents, paints, cleaning agents and rubber shall be handled in a manner that the construction products or empty containers/tubes shall not be allowed into any stream. Construction debris developed from the cutting, grinding or sizing of solid construction products including plastics and Styrofoam shall not be allowed on the ground or to blow into a stream.

Concrete curing compounds shall not be applied in a manner that the chemical will be spilled, dripped or be discharged into streams. Containers and rags used during application of curing compound shall be properly disposed of off project. Do not store curing compound containers and drums on TxDOT ROW.

ITEM 421: HYDRAULIC CEMENT CONCRETE

Air-entrained concrete is not required

ITEM 462: CONCRETE BOX CULVERTS AND STORM DRAINS

Joints between pre-cast concrete box culverts shall be pre-formed flexible joint sealants as described in Item 464.3C, “Jointing”.

ITEM 464: REINFORCED CONCRETE PIPE

Install all reinforced concrete pipe on this project using pre-formed flexible joint sealant.

ITEM 467 SAFETY END TREATMENT

Welds are not allowed to splice Safety Pipe Runners. A Safety Pipe Runner shall be one continuous pipe.

Riprap shall be included with all Type II SETs.

ITEM 496: REMOVING STRUCTURES

All pipe culverts removed under this contract shall become the property of the contractor to be disposed of off the right of way unless otherwise directed by Engineer.

Remove and salvage all dedication medallions and/ or plaques found attached to any existing bridge structure being replaced. Each medallion and plaque shall be cleaned free of all concrete and foreign matter, and shall be turned over to the Engineer in a timely manner. All work performed in the removal, salvaging and cleaning of the medallions and plaques will not be paid for directly but shall be subsidiary to the various bid items. The Engineer shall collect the medallions and plaques, tagging each of them with its respective highway number, name of creek or stream crossing and date of removal, and send them to the Waco District Environmental Coordinator for further handling.

The Contractor shall make every attempt to prevent debris and rubble from falling into the stream during the removal of the bridge. If any debris or rubble should fall into the stream it shall be removed as soon as possible. Relocate large pieces of any demolished culvert to the high bank and outside of the Ordinary High Water Marks before processing into smaller pieces. Concrete fines shall be minimized from entering a stream

ITEM 502: BARRICADES, SIGNS AND TRAFFIC HANDLING

Schedule and execute the work such that the portion of the roadway not sealed and striped at any given time is kept to a minimum and is no more that 2 miles.

All signs, delineators, object markers, and route markers shall be in place prior to opening each phase of construction to traffic.

When a culvert extension, inlet construction and/or safety end treatment and open excavation, etc. is within 16 feet of a travel lane then delineate these areas as shown on the BC standard sheets. In addition a 4 foot high plastic construction fence shall be required at or around any structure or obstruction that would be a hazard to pedestrians unless otherwise approved by the Engineer. This fence shall be erected in a manner acceptable to the Engineer. Construction fencing will not be paid for separately, but will be considered subsidiary to Item 502.

The Contractor Responsible Person (CRP) for Work Zone Traffic Controls shall inspect and insure any deficiencies are corrected each and every day through out the duration of this contract. Any misaligned or damaged traffic control devices shall be repaired as soon as practical after deficiency is discovered.

The **shadow vehicle** with truck mounted attenuator (TMA) will not be optional but will be required as shown on the appropriate traffic control plan sheets. Truck mounted attenuators shall meet the requirements of the Compliant Work Zone Traffic Control Device List. The use of truck mounted attenuators shall not be paid for directly, but shall be considered subsidiary to Item 502.

Open the pavement to traffic each night. Remove all material stockpiles, equipment left overnight or any obstruction within 30 feet of a travel way or clearly mark by warning lights and barricades, as approved by the Engineer.

Arrange construction operations to prevent the hauling of materials through the completed pavement sections unless otherwise approved by the Engineer.

Unless otherwise shown on plans, where there is excavation adjacent to the pavement edge, provide adequate warning signs, vertical panels, drums and reflectors at the pavement edge, as directed by the Engineer. Treat pavement drop-offs created by ACP operations in a similar manner and in accordance with the details shown in the plans.

When excavation is required next to a travel lane carrying traffic and widening is not completed by the end of the day's operation, and unless otherwise permitted in the plans, place sufficient backfill against the edge of the travel lane in order to provide a 3:1 slope. The backfill used shall be durable crushed stone type of flexible base or other materials approved by the Engineer. When work is resumed on this excavated area this backfill material shall be incorporated into the road work or disposed of as approved by the Engineer. Materials and labor for this work will not be paid for directly but will be subsidiary to the various bid items.

Provide a pilot vehicle for this contract.

Prior to beginning work, the Contractor and Engineer shall agree on the allowable length of lane closure.

The maximum allowable length of roadway sections for scarifying and reshaping the existing base and hauling base material, shall be 2 miles. Station competent flaggers at each end of the section being processed to instruct and/or direct the traveling public. Base work shall not begin in the adjoining 2 mile section until Emulsified Asphalt Treatment operation is complete. No more than 4 miles of completed base and Emulsified Asphalt Treatment work shall be left in place before applying 1st course of seal coat.

Equip all construction equipment involved in roadway work with a permanently mounted warning light with amber lens as approved by the Engineer.

ITEM 506: TEMPORARY EROSION, SEDIMENTATION AND ENVIRONMENTAL CONTROLS

No soil disturbing activities shall begin on any section of TxDOT ROW without adequate sedimentation controls first being installed and functioning at adjacent drainage outfalls. Repairs, additions and maintenance of erosion and sedimentation control devices shall be completed within two working days after the Contractor receives each Form 2118, Field Inspection and Maintenance Report, from the Engineer. The same two day completion time frame is required for work identified in the daily inspections performed by the Contractor. Failure of the Contractor to fulfill either of the above requirements places TxDOT in potential non-compliance with permit requirements and may result in holding estimates, stop work or both until environmental permit requirements are fulfilled.

Furnish one SW3P permit posting sign and sign support as detailed in the plans. Install this sign in a location selected by the Engineer. The sign and support should be removed upon completion of the project and is the property of the Contractor. The purchase of the sign and support, installation, relocation(s) if determined necessary by the Engineer and removal at project end shall be subsidiary to Item 506.

Prior to TxDOT allowing the Contractor to start construction, the Contractor shall provide the required storm water and 404 permit documentation and support activities, including but not limited to the following:

- Provide a list of all chemicals, construction and waste products that will be generated, stored or brought upon TxDOT ROW. The list includes expected construction debris, sanitary wastes, construction chemicals and petroleum products used or generated by the Contractor and sub-contractors. Along with the list, the Contractor shall supply a spill prevention plan and clean up procedures that will include each of these chemical products or generated waste.

- Provide in the construction schedule and necessary line items that will comply with the schedule and planning requirements of the storm water permit.

- Post the TxDOT storm water permit and any Contractor permits, per permit requirements.

- Provide copies of storm water permits for Contractor PSL(s). As new PSL(s) may be obtained for the project, provide copies of new or amended permits to TxDOT. The Contractor shall not disturb soil without the proper permits.

- Provide scale drawings of off ROW PSL's within one mile of the project, for field offices, borrow sources, plant sites or other uses.

- Provide permit information on any Contractor batch plants or concrete crushing plants to be located at a Contractor PSL(s) within one mile of the project limits or boundaries. Copies of the air and water permits are to be provided to TxDOT before materials shall be used on the project. No asphalt or concrete batch plants or concrete crushing plants shall be located on TxDOT ROW.

- Provide a letter indicating a Contractor Responsible Person for environmental compliance (CRP) for the project, and maintain a CRP throughout the project duration.

Place and maintain trash cans and portable sanitary facilities at locations where there is active construction. Worker generated trash and construction debris shall be kept from being transported by storm water and shall be collected daily from the ground and routinely hauled from the work area.

Contractor shall provide TxDOT copies of all correspondence with MS4s, TCEQ, EPA, DSHS and Corps of Engineers regarding activities on this project.

Contractor to conduct storm water inspections and develop SWPPP documents to support Contractor permits obtained for the project including PSL(s).

Contractor shall maintain written documentation of locations of all portable sanitary facilities. The Contractor is required to document the location and disposition of all spills and cleanups from portable sanitary facilities.

Contractor shall not store chemicals on TxDOT ROW, unless chemicals are stored following all environmental and safety regulations. Fuels for construction equipment shall not be stored on TxDOT ROW.

The Contractor shall store fuels and bulk chemicals on Contractor PSL(s) using a secondary containment method, such as double lined tanks and/or free standing containment reservoirs made of plastic or steel designed to hold bulk chemicals or drums.

The Contractor shall not remove sediment controls without the prior approval of TxDOT, except for a sediment control that may back up water and cause safety or traffic problems.

Vegetative buffer strips may be used in place of temporary sediment controls such as silt fences and rock filter dams. The amount of disturbed soil area shall be limited to 1/3 of an acre or less for a minimum of 50 feet of grassed ditch and 2/3 of an acre of disturbed soil for a minimum of 100 feet of grassed ditch.

Construction equipment found to be leaking oil, fuel or coolant shall be immediately stopped, the leaking fluid collected and the equipment fixed. Equipment continuing to leak shall be removed from the project at no cost to TxDOT. Leaking fluids from equipment shall be collected and removed from the project or PSL.

Earth berms or mounds typically used to stockpile topsoil and used in place of boundary silt fence shall be seeded upon being constructed. Long term use of earth berms or mounds shall not be continued without establishing grass on the control.

The Contractor shall maintain an adequate amount of temporary sediment controls on hand at the field office or project staging area for critical SWPPP maintenance, including silt fence (minimum of 200 feet) and rock / fabric for rock filter dams (minimum for 100 feet of Type III dams).
Failure of a sub-contractor to complete storm water work on time shall require the Contractor to start storm water sediment control work immediately and complete the work with high priority, or be subject to stop work on the entire project.

Earth materials on roads as a result of soil tracking shall not be allowed to be transported off ROW in storm water. Soil or rock material found on roadways deposited from Contractor equipment shall be removed daily.

Unless approved by the Engineer, completed concrete curb inlets shall not be blocked by sediment controls. The contractor shall frequently sweep the completed or partially completed roadway to keep sediment out of drainage pipes.

The Contractor shall be responsible for proper dust control and shall route construction traffic in a manner that minimizes dust generation.

Water for dust control shall contain no pollutants, but may be non-potable from upland stock ponds. No quantity of water to be used for construction purposes may be taken from a 404 stream, prior to the proper authorizations or permits being obtained by the Contractor.

Contractor is to direct workers and sub-contractors to use portable sanitary facilities and not to trespass off ROW.

Contractor shall provide written verification to TxDOT that earth borrow pits and disposal sources meet environmental and regulatory requirements, prior to use. Excavations shall meet all OSHA requirements and the current safety guidelines established for TxDOT Quarries and Pits.

Boundary silt fences that are terminated down slope, with one end being at the lowest elevation, shall be installed with an L – hook to contain sediment. Boundary silt fences that are installed on flat ground shall have L-hooks on both ends.

Compost logs, of any size, shall not be used for sediment control in ditch applications or any location where there is concentrated storm water flow.

Rock filter dams across ditches shall be constructed where the rock filter dam ends are embedded within the ditch side slopes and ditch bottom. The top center elevation of the rock filter dam shall be at least 6 inches lower than the elevations on the rock filter dam ends.

Silt fence shall be constructed in a large V pattern across ditch lines and up the ditch side slope to keep storm water from flowing around the ends of the silt fence. Small silt fences that do not adequately span the ditch and allows storm water around the end(s) shall not be used.

Sediment controls (RFDs or silt fences) shall be located along road ditches as marked on the SWPPP drawings. Modifications to the sediment control spacing shall be adjusted during the project based on sediment control effectiveness. The installation and maintenance of sediment controls at or near outfalls, where storm water leaves TxDOT ROW, takes persistent over ditch line sediment controls.

Storm water draining sheet flow over disturbed soil sloped towards the ROW property line, shall be intercepted by a boundary silt fence typically installed with L-shaped ends.

For ditch grading and shoulder up work, the Contractor is limited during good weather to remove up to one mile (limited to five acres of disturbed soil) of ditch line sediment controls; on one side of the roadway. Outfall controls cannot be removed during this activity. Ditch line controls must be replaced upon completion of work and before the next rain event,

Sediment controls damaged by the Contractor, as defined by permit, must be fixed or replaced immediately upon discovery.

Notches in silt fences are not typically allowed. Specific silt fences that back up water onto lanes of traffic may be notched if approved by the Engineer.

For silt fence maintenance, the Contractor shall leave 4 inches of deposited sediment up stream of silt fences and not over excavate around silt fences or rock filter dams.

The Contractor shall assist TxDOT in keeping an accurate set of working SWPPP drawings that show the locations of all temporary sediment controls. Additionally, the sediment control types, sizes, including dates of installation and removal shall be marked up and maintained on the working SWPPP drawings. The working SWPPP drawings shall indicate those failed sediment controls that have been replaced in kind or replaced with another control.

The Contractor shall inform TxDOT of new construction areas and where soil is planned to be disturbed. Sediment controls shall be installed at outfalls prior to the Contractor beginning soil disturbing activities up slope from the outfall.

Water for dust control shall contain no pollutants, but may be non-potable from upland stock ponds. No quantity of water to be used for construction purposes may be taken from a 404 stream, prior to the proper authorizations or permits being obtained by the Contractor.

The Contractor shall be responsible for proper construction exits and dust control and shall route construction traffic in a manner that minimizes dust generation and sediment transport on the roadways.

Water from concrete saw cutting, concrete grinding and concrete coring activities; or fine materials from concrete chipping and salvage shall not be allowed to enter storm drains or enter streams.

Storm water containing suspended sediment and turbidity needing to be removed from excavations or low areas shall be pumped or gravity drained through vegetated buffer strips (50 foot minimum) or placed in ditches with temporary sediment controls, prior to the water being discharged into a stream.

Uncontaminated water from natural groundwater seepage, springs, foundations and drains that does not contain suspended sediment or any pollutants may be discharged without storm water controls.

Lime or cement if spilled in ditches or outside the defined limits of application is considered a pollutant and shall be excavated and removed the same day, to avoid contaminating streams.

Piles of spilled asphaltic concrete / rock shall be picked up and disposed of within 48 hours.

If located along the project ROW, RAP stockpiles shall be located where there is a minimum 100 feet of vegetative buffer strip before storm water will reach a stream. RAP shall not be used as a construction material within the Ordinary High Water Marks of a stream channel of a 404 designated stream.

If allowed on the project, concrete truck wash out areas shall have adequate volume to allow 12 inch freeboard for rain and shall be lined with 6 mils of plastic. No concrete shall be stored higher than the 12 inch freeboard. Cleaning of truck chutes and equipment does not constitute concrete truck wash out and this activity may be completed at the concrete placement location. Wash out areas shall not be located closer than 50 ft from down slope inlets or stream channels.

For outfalls near stock ponds closer than 50 foot from disturbed soil at the ROW line, redundant sediment controls shall be provided, typically a combination of rock filter dam and a silt fence constructed in line of the flow.

Earth stockpiles shall utilize silt fence sediment controls, positioned on the low end of the stockpile drainage area with L-hooks or silt fence installed around the entire stockpile.

Sediment controls including rock filter dams and silt fences shall not be installed across any 404 streams. Sediment controls at 404 streams shall be positioned to limit sediment entering the stream from the banks and around structures/culverts, and shall allow free flow of storm water to pass through the ROW without being dammed by any sediment controls. Remove loose materials from stream channels prior to each rain event.

Sediment controls for non-404 streams may be constructed across the drainage channel in unlimited locations. It is appropriate to use sediment control details typically used for 404 streams for non-404 streams when flow velocities are high. Remove loose material from stream channels prior to each rain event.

Incomplete drainage pipe installation across the roadway does not remove the requirement for having sediment controls around the ends of the pipe. To stay within permit requirements, sediment controls should be installed over and around the terminated end and along each side of the banks as soon as construction on the pipe has been completed. Remove loose material from stream channels prior to each rain event.

Safety end / headwall construction temporarily will require the removal of part of the sediment control placed over and around the pipe end. Retain in place as much functioning sediment control as possible. Replace the silt fence over and around the top of the pipe, immediately upon concrete placement and form removal. Do not remove culvert sediment controls that cannot be replaced before the next rain event. Sediment control at the ends of culverts must be in place and available for any rain event until the disturbed soil areas are re-vegetated.

Between the Ordinary High Water Marks of a 404 stream channel, the Contractor shall disturb only the minimum amount of stream channel that is necessary to complete the work.

Rock rip-rap for erosion control does not replace the requirements to maintain sediment control until vegetation is re-established. Replace sediment controls immediately after installing erosion rock.

At the direction of TxDOT, sediment deposited in existing and new culverts shall be removed at the direction of TxDOT and subsidiary to Item 506.

ITEM 560: MAILBOX ASSEMBLIES

Mail boxes will be kept in a position accessible to the carrier's vehicle along the travel way except when performance of grading operations necessitates the moving of mail boxes. When grading operations necessitate the moving of mail boxes, the contractor shall place them at a nearby location which will be accessible to the carrier's vehicle. Mail boxes will be returned to a position accessible to the carrier's vehicle along the travel way when grading operations are not in progress. This work will not be paid for directly, but will be subsidiary to Item 560.

ITEM 658: DELINEATOR AND OBJECT MARKER ASSEMBLIES

The delineator assembly type C Class A (D-SW) and (D-SY) are to be single delineators (Class I) attached to a flat, plastic bracket to facilitate the mounting of the delineator on top of the bridge rail at the locations shown on the plans. Submit a sample for approval before ordering materials.

For all delineators and object markers, furnish a tubular post minimum of 2 inches diameter with a flat surface at least 3 inches wide and 15 inches long for delineator mounting meeting the requirements of DMS-4400. Use the Wedge Anchor Plastic System for ground mounted delineators set in concrete as shown on the D&OM(1)-04 standard. Submit one assembly or a material cut sheet to the Engineer for approval prior to installation.

ITEM 672: RAISED PAVEMENT MARKINGS

Place TYPE II-C-R and TYPE I-C markers for lane lines on 80 feet centers regardless of the conditions listed on the Pavement Markings Standard Details.

ITEM 6110: REFLECTORIZED PAVEMENT MARKINGS

Apply beads using a single drop application process. Use an application rate of 12 pounds per 100 square feet of thermoplastic pavement marking material.

The Engineer will verify the beginning and ending points of No Pass Zones.

Make all stop lines twenty-four (24) inches wide.

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